



### State Water Resources Control Board

Division of Drinking Water

March 10, 2017

System No.: 2400340

Mr. Mike Zaro, Owner Pelligrini Properties/El Campo Market 1417 Cherrydale Drive San Jose, CA 95125

### RE: CITATION NO. 03-11-17C-012, Source Flow Meter

Enclosed is a Citation issued to the Pelligrini Properties/El Campo Market (hereinafter "Water System") public water system.

The Water System will be billed at the State Water Resources Control Board's (hereinafter "State Board") hourly rate (currently estimated at \$161.00) for the time spent on issuing this Citation. California Health and Safety Code, Section 116577, provides that a public water system must reimburse the State Board for actual costs incurred by the State Board for specified enforcement actions, including but not limited to, preparing, issuing and monitoring compliance with a citation. At this time, the State Board has spent approximately 2.0 hour(s) on enforcement activities associated with this violation.

The Water System will receive a bill sent from the State Board in August of the next fiscal year. This bill will contain fees for any enforcement time spent on the District for the current fiscal year.

If you have any questions regarding this matter, please contact Austin Ferreria of my staff at 559-447-3300 or me at 559-447-3316.

Sincerely,

assy D. Chaulan) Kassy D. Chauhan, P.E.

Senior Sanitary Engineer, Merced District

Central California Section

SOUTHERN CALIFORNIA BRANCH

DRINKING WATER FIELD OPERATIONS

Enclosures

Certified Mail No.: 7016 1370 0000 0455 3260

Ms. Sandra Anderson, Trustee – 3920 Lighthouse Place, Discovery Bay, CA 94505 CC:

Merced County Environmental Health Department

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# STATE OF CALIFORNIA WATER RESOURCES CONTROL BOARD DIVISION OF DRINKING WATER

IN RE: PELLIGRINI PROPERTIES/EL CAMPO MARKET

WATER SYSTEM NO. 2400340

Mr. Mike Zaro, Owner

1417 Cherrydale Drive San Jose, CA 95125

Ms. Sandra Anderson, Trustee

3920 Lighthouse Place Discovery Bay, CA 94505

Merced County Environmental Health Department

### CITATION FOR VIOLATION OF CALIFORNIA CODE OF REGULATIONS, TITLE 22, SECTION 64561 Source Flow Meters

Issued on March 10, 2017

Section 116650 of the California Health and Safety Code authorizes the issuance of a citation to a public water system for violation of the California Safe Drinking Water Act (Health and Safety Code, Division 104, Part 12, Chapter 4, commencing with Section 116270) (hereinafter "California SDWA"), or any regulation, standard, permit or order issued or adopted thereunder.

The State Water Resources Control Board (hereinafter "Board"), acting by and through its Division of Drinking Water (hereinafter "Division") and the Deputy Director for the Division (hereinafter "Deputy Director"), hereby issues a citation to the Pelligrini Properties/El Campo Market Water System (hereinafter "Water System") (8973 Highway 140, Planada, CA 95365) for violation of California Code of Regulations (CCR), Title 22, Section 64561.

### APPLICABLE AUTHORITIES

The applicable statutes and regulations are provided in Appendix A, attached hereto and incorporated by reference.

### **STATEMENT OF FACTS**

The Water System is a transient-noncommunity water system serving a transient population of approximately thirty (30) persons per day through two (2) service connections. Effective April 1, 2014, the Merced County Department of Environmental Health transferred the jurisdictional regulatory oversight for this water system to the Division. The Water System currently operates under a water supply permit (No. 03-11-16P-028) issued by the Division on September 9, 2016 (Appendix B).

The Division conducted a sanitary survey of the Water System on June 10, 2016, and observed that a flow meter was not installed on the discharge piping from Well No. 1. The Division noted the need to install a totalizing flow meter at a point between the source and the entry point to the distribution system and submit photo documentation to the Division by December 31, 2016. In addition, the System was required to begin recording monthly well production quantities on at least a monthly basis and reporting those quantities to the Division annually via the electronic Annual Report to the Drinking Water Program (e-ARDWP). Despite the Division's efforts to inform the Water System of the requirements to install a flow meter and record the total monthly water production, the Water System has failed to install the flow meter and begin reporting the monthly production from Well No. 1 annually to the Division.

### **DETERMINATION**

Title 22, CCR, Section 64561, Source Flow Meters provides that each water system shall install a flow meter at a location between each water source and the entry point to the distribution

system and meter the quantity of water flow from each source, and record the total monthly production each month.

The Division has determined that the Water System failed to comply with Title 22, CCR, Section 64561, Source Flow Meters by failing to install a flow meter at Well No. 1 and for failure to meter the quantity of water flow from each source and record the total monthly production each month.

### **ADMINISTRATIVE PENALTIES**

### Pursuant to CHSC Section 116650

Sections 116650(a) of the CHSC allows for the issuance of a citation for failure to comply with the requirements of the California Safe Drinking Water Act, or any regulation, permit, standard, citation, or order issued thereunder. Section 116650(d) and (e) allow for the assessment of a penalty not to exceed one thousand dollars (\$1,000) per day for each day that a violation occurs.

Despite the Division's efforts to work with the Water System, the Water System has failed to comply with Section 64561. Therefore, the Division hearby assesses an administrative penalty of one thousand and five hundred dollars (\$1,500) upon Water System. Directive No. 5 below describes the requirements for payment of the Penalty and conditions under which the Division may waive the requirement to pay the penalty.

### **DIRECTIVES**

The Water System is hereby directed to take the following actions:

 On or before <u>March 31, 2017</u>, submit a written response to the Division indicating its willingness to comply with the directives of this citation.

- 2. On or before May 31, 2017, install a source flow meter on Well No. 1 at a point between the source and the entry point to the distribution system per Section 64561.
- On or before <u>May 31, 2017</u>, submit photo documentation to the Division showing the installation of the flow meter on Well No. 1 at a point between the source and the entry point to the distribution system in accordance with Section 64561.
- 4. Beginning in June 2017 or before, record the total production from each active source a minimum of monthly and report the total monthly production to the Division annually via the Electronic Annual Report.
- Pay the Penalty of one thousand and five hundred dollars (\$1,500) within 90 days of the receipt of this Citation. Payment shall be made payable to the State Water Resources Control Board – Division of Drinking Water. Further instruction on the payment is provided in Appendix C, Notice of Citation Issuance.

If the Water System complies with Directives 1, 2, 3, and 4 before the Penalty becomes due, and upon written request from the Water System, the Division will consider, at its sole discretion, terminating the requirement to pay the penalty.

6. If the Water System is unable to perform the tasks specified in this citation for any reason, whether within or beyond its control, and if the Water System notifies the Division in writing no less than five days in advance of the due date, the Division may extend the time for performance if the Water System demonstrates that it has used its best efforts to comply with the schedule and other requirements of this citation.

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The Division reserves the right to make such modifications to the Citation as it may deem necessary to protect public health and safety. Such modifications may be issued as amendments to this Citation and shall be effective upon issuance.

Nothing in this Citation relieves the Water System of its obligation to meet the requirements of the California Safe Drinking Water Act or any regulation, standard, permit or order issued thereunder.

All submittal required by this Citation shall be submitted to the Division at the following address:

Kassy D. Chauhan, P.E.
Senior Sanitary Engineer
State Water Resources Control Board
Division of Drinking Water
265 W. Bullard Avenue, Suite 101
Fresno, CA 93704

### **PARTIES BOUND**

This Citation shall apply to and be binding upon the Pelligrini Properties/El Campo Market Water System, its officers, directors, agents, employees, contractors, successors, and assignees.

### **SEVERABILITY**

The Directives of this Citation are severable, and the Water System shall comply with each and every provision thereof notwithstanding the effectiveness of any provision.

### FURTHER ENFORCEMENT ACTION

The California SDWA authorizes the Board to: issue citation with assessment of administrative penalties to a public water system for violation or continued violation of the requirements of the California SDWA or any permit, regulation or order issued or adopted thereunder including, but not limited to, failure to correct a violation identified in a citation or compliance order. The

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California SDWA also authorizes the Board to take action to suspend or revoke a permit that has been issued to a public water system if the system has violated applicable law or regulations or has failed to comply with an order of the Board; and to petition the superior court to take various enforcement measures against a public water system that has failed to comply with an order of the Board. The Board does not waive any further enforcement action by issuance of this citation.

3-10-2017

Date

Carl Carluosi D.E.

Carl L. Carlucci, P.E.

Supervising Senior Sanitary Engineer,

Central California Region

DRINKING WATER FIELD OPERATIONS BRANCH

CERTIFIED NO.: 7016 1370 0000 0455 3260

### CLC/KDC/Citation/no flow meter

### Appendices:

Appendix A: Applicable Authorities

Appendix B: Water Supply Permit No. 03-11-16P-028

Appendix C: Notice of Citation Issuance



### APPENDIX A

### Applicable Statues and Regulations for Citation No. 03-12-17C-XXX

## Section 116650 of the CHSC states in relevant part: §116650. Citations

- (a) If the Division determines that a public water system is in violation of this chapter or any regulation, permit, standard, citation, or order issued or adopted thereunder, the Division may issue a citation to the public water system. The citation shall be served upon the public water system personally or by certified mail. Service shall be deemed effective as of the date of personal service or the date of receipt of the certified mail. If a person to whom a citation is directed refuses to accept delivery of the certified mail, the date of service shall be deemed to be the date of mailing.
- (b) Each citation shall be in writing and shall describe the nature of the violation or violations, including a reference to the statutory provision, standard, order, citation, permit, or regulation alleged to have been violated.
- (c) A citation may specify a date for elimination or correction of the condition constituting the violation.
- (d) A citation may include the assessment of a penalty as specified in subdivision (e).
- (e) The Division may assess a penalty in an amount not to exceed one thousand dollars (\$1,000) per day for each day that a violation occurred, and for each day that a violation continues to occur. A separate penalty may be assessed for each violation.

Section 64561 of Title 22, California Code of Regulations states in relevant part: §64561. Source Flow Meters.

Each water system shall:

- (a) Except for inactive sources, install a flow meter at a location between each water source and the entry point to the distribution system;
- (b) Meter the quantity of water flow from each source, and record the total monthly production each month.







### State Water Resources Control Board

Division of Drinking Water

September 9, 2016

System No.: 2400340

Ms. Susan Anderson, Trustee Pellegrini Properties – El Campo Market 3920 Lighthouse Place Discovery Bay, CA 94505

Dear Ms. Anderson,

### RE: Water Supply Permit - No. 03-11-16P-028

The purpose of this letter is to inform you that the State Water Resources Control Board Division of Drinking Water (Division) has issued a domestic water supply permit for the El Campo Market Water System (System). The Domestic Water Supply Permit, Water Quality Monitoring Schedule, Engineering Report and other documents are attached to this letter. Please review the engineering report and provide any comments or corrections to the Division in writing.

In addition to the permit provisions included in the permit, the following items must be addressed by the System:

- Given the close proximity to the Planada CSD public water system, the System should consider establishing a connection to the Planada CSD water system. The Division will require the System to review the feasibility of connecting to the Planada CSD if the single well that supplies the convenience store/market and warehouse is unable to meet system demands or if the wellhead fails and a new source of supply is needed.
- 2. The System needs to extend the vent on the air relief valve to ensure that the vent terminates at least 36 inches above finished grade and that it is properly inverted downward with a fine meshed screen on the end to protect the well from potential contamination. The System must submit photo documentation to the Division by October 31, 2016, to show that the modifications on the air relief valve have been completed.
- 3. The System needs to raise the wellhead in the future if the pump is pulled and work is completed on the casing. The wellhead should terminate at least 18 inches above finished grade. In addition, a new concrete surface seal needs to be installed to ensure that the area surrounding the wellhead is seal to protect the wellhead from potential contamination.
- 4. The System must install a flow meter equipped with a totalizer at a location between the wellhead and the entry point to the distribution system as required in the

California Waterworks Standards. The system must submit receipts and/or photos as proof of flow meter installation by December 31, 2016. Beginning in January 2017, the System must begin recording the total production from the well at least one time per month and report the monthly production totals to the Division each year on the electronic annual report to the Drinking Water Program (e-AR).

- 5. In addition, the well is located in an empty field at the back of the convenience store/market and is surrounded by overgrown by weeds. The System should ensure that the area around the wellhead and the pressure tank are periodically checked and kept free of overgrown weeds and debris. The System should submit photo documentation to the Division by October 31, 2016, showing that the area around the wellhead and pressure tank has been cleared and the overgrown weeds have been removed.
- 6. The well discharge piping did not contain a raw water sample tap at the time of the inspection. The System needs to install a raw water sample tap at the wellhead to ensure that water quality samples can be collected prior to the water entering the distribution system. The System needs to provide photo documentation to the Division by December 31, 2016, as proof that the raw water sample tap has been installed.
- 7. The electrical box at the wellhead had several openings at the time of the inspection. The System needs to seal all of the opening as well as the area where the electrical conduit enters the wellhead to reduce the potential for contamination from small animals/insects and/or debris entering the wellhead through the electrical box or conduit. The System needs to submit photo documentation to the Division by October 31, 2016, showing that the openings on the electrical box have been sealed.
- 8. An Emergency Chlorination Plan must be developed and submitted to the Division. Details of what is to be included in the plan can be found in the guidance document attached to this report. The System should use the attached guide to create an Emergency Chlorination Plan and submit it to the Division by October 31, 2016, (Attachment B) for review and approval.
- 9. The System must conduct a cross-connection control survey to identify potential hazards by December 31, 2016. The system must install backflow prevention devices to prevent possible contamination at locations identified in the survey by January 31, 2017. A cross-connection control guidance document for noncommunity water systems is provided in Attachment C.
- 10. The System must establish a BSSP following the attached guidelines by **September 30, 2016**. A BSSP has been prepared for you and if it is acceptable to you, please sign and date the attached BSSP (Attachment D) and return to the Division for the system file. The System should also provide a copy of the approved BSSP to the analytical laboratory that is used for conducting bacteriological monitoring.

Ms. Anderson September 9, 2016 Page 3

11. The System must complete the required one time monitoring for manganese, iron, magnesium and sodium monitoring by **October 31, 2016**. All water quality monitoring results must be submitted electronically via Electronic Data Transfer (EDT) using the primary station code for Well No. 1 (2400340-001). If hard copies of the results from monitoring that has previously been completed are available, the System can submit the hard copies of the results and the Division will ensure that the results get submitted into the Division's WQI database.

Please acknowledge in writing by September 30, 2016, receipt of this water supply permit, your willingness to comply with the permit provisions and any comments or corrections to the technical report. This permit contains an all-inclusive list of applicable special permit provisions.

The assistance provided during the preparation of these water supply permit documents is greatly appreciated. If you have any questions regarding the permit provisions or the list of action items above, please contact Austin Ferreria at 559-447-3300.

Sincerely,

Kassy D. Chauhan, P.E. Senior Sanitary Engineer

Merced District

Central California Section

SOUTHERN CALIFORNIA BRANCH

DRINKING WATER FIELD OPERATIONS

**Enclosures** 

Cc: Merced County Environmental Health Division

KDC/2400340/2016 transmittal letter - Sept 9 2016.doc

# STATE WATER RESOURCES CONTROL BOARD DIVISION OF DRINKING WATER

Certificate of Issuance

# **WATER SUPPLY PERMIT**

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Pellegrini Properties For the Operation of The El Campo Market Water System System No. CA2400340 This is to certify that a water supply permit 03-11-16P-028 has been issued to Pellegrini Properties on September 9, 2016, to supply water for domestic purposes to the El Campo Market Water System. The permit was issued by the State Water Resources Control Board - Division of Drinking Water, pursuant to the provisions of Division 104, Part 12, Chapter 4, Article 7, of the California Health and Safety Code. The permit is subject to the requirements of Title 22, California Code of Regulations, and to the conditions provided in the water supply permit.



A copy of the water supply permit is on file with the El Campo Market Water System or may be obtained by contacting the Merced District Office of the State Water Resources Control Board -Division of Drinking Water, Field Operations Branch, 265 W. Bullard Ave., Ste. 101, Fresno, CA

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### State Water Resources Control Board

Division of Drinking Water

### STATE OF CALIFORNIA

DOMESTIC WATER SUPPLY PERMIT ISSUED TO
Pellegrini Properties
For the Operation Of The
El Campo Market Water System
Water System No. 2400340

PERMIT NO. 03-11-16P-028

EFFECTIVE DATE: September 9, 2016

### WHEREAS:

- 1. Pellegrini Properties is the owner of the El Campo Market Water System (System) and submitted an application for a water supply permit dated April 4, 2016. Prior to April 2016, the System was not regulated because it had been determined that the System did not meet the definition of a public water system.
- 2. The public water system is known as the El Campo Market Water System whose headquarters is located at 3920 Lighthouse Place, Discovery Bay, CA 94508 and is physically located at 8973 Highway 140, Planada, CA 95365.
- 3. The public water system for which a new domestic water supply permit is being issued is described briefly below:

The System serves a convenience store/market and a warehouse building that is occupied with office space and a repair shop. It is located on Highway 140 in Merced, CA, Merced County. The system is classified as a transient-noncommunity (TNC) water system. The System is served by one well that is equipped with a submersible pump and one 119-gallon steel pressure tank to provide system pressure. The El Campo Market and the warehouse building have the same owner and share a single source of supply for their domestic water supply. The System has a septic system which is located greater than 100 feet from the well.

### And WHEREAS:

1. The El Campo Market Water System has submitted all of the required information relating to the operation of the water system.

Pellegrini Properties (El Campo Market) Permit No. 03-11-15P-059 September 9, 2016 Page 2 of 3

- 2. The State Water Resources Control Board, Division of Drinking Water has evaluated all of the information submitted by the Pellegrini Properties for the El Campo Market Water System and has conducted a physical investigation of the water system.
- 3. The State Water Resources Control Board, Division of Drinking Water has the authority to issue domestic water supply permits pursuant to Health and Safety Code Section 116540.

### THEREFORE:

- 1. The El Campo Market Water System meets the criteria for and is hereby classified as a transient-noncommunity water system.
- 2. The applicant has demonstrated that the El Campo Market Water System has adequate technical, managerial, and financial capacity to operate the water system.
- 3. Provided the following conditions are complied with, the El Campo Market Water System should be capable of providing water to consumers that is pure, wholesome, and potable and in compliance with statutory and regulatory drinking water requirements at all times.

THE SYSTEM OWNER, PELLEGRINI PROPERTIES, IS HEREBY ISSUED THIS DOMESTIC WATER SUPPLY PERMIT TO OPERATE THE EL CAMPO MARKET WATER SYSTEM.

The El Campo Market Water System shall comply with the following permit conditions:

- The permitted active source for the El Campo Market Water System is Well No. 1 (PS Code 2400340-001). The Merced District Office of the Drinking Water Field Operations Branch (DWFOB) must permit all other sources before they can be used in the water system.
- The El Campo Market Water System must comply with the attached water quality monitoring schedule for Well No. 1. All water quality monitoring results obtained in a calendar month must be submitted to the Division via electronic data transfer (EDT) by the tenth day of the following month.
- 3. The El Campo Market Water System shall submit plans and specifications for all proposed sources of supply and/or water treatment projects to the Division for review and approval prior to construction.
- 4. The El Campo Market Water System must submit an annual report to the Drinking Water Program each year, documenting specific system information for the prior year. The report shall be in the format specified by the Division and be submitted by the deadline specified by the Division.
- 5. The El Campo Market must monitor the distribution system for total coliform bacteria in accordance with the approved bacteriological sample siting plan (BSSP).
- 6. The El Campo Market must record the water production from Well No. 1 on at least a monthly frequency and report the total yearly production to the Division via the

Pellegrini Properties (El Campo Market) Permit No. 03-11-15P-059 September 9, 2016 Page 3 of 3

electronic annual report (<a href="http://drinc.ca.gov/ear/home.aspx">http://drinc.ca.gov/ear/home.aspx</a>) at the beginning of each calendar year.

7. The El Campo Market must conduct a cross-connection control survey of the water system to identify and locate existing backflow preventers and determine possible contamination locations where backflow preventers would need to be installed. The System must test all backflow prevention devices once a year and conduct a cross-connection control survey once every five years.

This permit supersedes all previous domestic water supply permits issued for this public water system and shall remain in effect unless and until it is amended, revised, reissued, or declared to be null and void by the State Water Resources Control Board, Division of Drinking Water. This permit is non-transferable. Should the El Campo Market Water System undergo a change of ownership, the new owner must apply for and receive a new domestic water supply permit.

Any change in the source of water for the water system, any modification of the method of treatment as described in the Permit Report, or any addition of distribution system storage reservoirs shall not be made unless an application for such change is submitted to the State Water Resources Control Board, Division of Drinking Water.

This permit shall be effective as of the date shown below.

FOR THE STATE WATER RESOURCES CONTROL BOARD, DIVISION OF DRINKING WATER

9/9/14

Kassy D. Chauhan, P.E. Senior Sanitary Engineer

Merced District

Central California Section

SOUTHERN CALIFORNIA BRANCH DRINKING WATER FIELD OPERATIONS

KDC/2400340/water supply permit.doc

Engineering Report
For the Consideration of a Permit for
Pellegrini Properties
For the Operation of The
El Campo Market Water System
System No. 2400340
Merced County
September 2016
State Water Resources Control Board
Southern California Branch
Drinking Water Field Operations
Kassy D. Chauhan, P.E - Senior Sanitary Engineer

### I. <u>INTRODUCTION</u>

### 1.1 PURPOSE OF REPORT

Pellegrini Properties is the owner of the El Campo Market Water System (System) which is now under the regulatory jurisdiction of the State Water Resources Control Board—Division of Drinking Water (Division). The System submitted an application dated April 4, 2016, for the operation of the El Campo Market Water System in Merced County. Formerly, the System was unregulated since it had not been determined that the system met the definition of a public water system. Based on information provided by the System on the Public Water System Determination Form, the Division determined that the System meets the definition of a public water system and must be regulated by the Division as a public water system. The purpose of this report is to describe the current state of the water system and to make recommendations regarding the issuance of a permit.

### 1.2 DESCRIPTION OF SYSTEM

The System serves a convenience store/market and a warehouse building that is occupied with office space and a repair shop. It is located on Highway 140 in Merced, CA, Merced County. The system is classified as a transient-noncommunity (TNC) water system. The System is served by one well that is equipped with a submersible pump and one 119-gallon steel pressure tank to provide system pressure. The El Campo Market and the warehouse building have the same owner and share a single source of supply for their domestic water supply. The System has a septic system which is located greater than 100 feet from the well.

### 1.3 SOURCES OF INFORMATION

Information for the preparation of this report was obtained from Mr. Michael Zaro; files from the Merced County Environmental Health Department; and a field inspection of the water system conducted on June 10, 2016, by Kassy Chauhan and Arnold Hatai.

### II. INVESTIGATION FINDINGS

### 2.1 AREA SERVED

The mailing address for the water system is 3920 Lighthouse Place, Discovery Bay, CA 94505. The system is located on CA-140 in Planada, CA. The System serves an average daily population of 15 people year around and a transient population of more than 25 people per day. The System is located adjacent to the Planada Community Services District (CSD) public water system. Given the close proximity to the Planada CSD public water system, the System should consider establishing a connection to the Planada CSD water system. The Division will require the System to review the feasibility of connecting to the Planada CSD if the single well that supplies the convenience store/market and warehouse is unable to meet system demands or if the wellhead fails and a new source of supply is needed.

### 2.2 GROUNDWATER SOURCE OF SUPPLY

### Well No. 1 (Active Untreated)

Well No. 1 (PS Code 2400340-001) is located behind the convenience store/market in a field that is surrounded by weeds. A Well Completion Report is not on file for this source so there is limited information available on the well's construction. The well contains a 6-inch diameter steel casing. It is unknown if an annular seal was constructed as it appears that the casing is surrounded by dirt rather than a concrete seal. The well is thought to be 320 feet deep based on information from the System owner. The well is equipped with a submersible pump. The size of the pump and the pump setting is unknown. The well discharges directly to a 119-gallon steel pressure tank that provides system pressure. A 36-inch diameter concrete surface seal was installed around the wellhead but the wellhead is flush with the concrete surface seal. The wellhead includes an air relief valve that was not properly extended, inverted and screened at the time of the inspection.

The System needs to extend the vent on the air relief valve to ensure that the vent terminates at least 36 inches above finished grade and that it is properly inverted downward with a fine meshed screen on the end to protect the well from potential contamination. The System must submit photo documentation to the Division by October 31, 2016, to show that the modifications on the air relief valve have been completed.

Pellegrini Properties (El Campo Market) Engineering Report September 2016 Page 3

The System needs to raise the wellhead in the future if the pump is pulled and work is completed on the casing. The wellhead should terminate at least 18 inches above finished grade. In addition, a new concrete surface seal needs to be installed to ensure that the area surrounding the wellhead is seal to protect the wellhead from potential contamination.

The discharge piping from the well includes a check valve and a pressure gauge prior to entering the steel pressure tank. The 1.5-inch diameter PVC discharge pipe leaving the pressure tank is equipped with a gate valve prior to a tee that routes the pipe underground where it extends to the convenience store/market and the warehouse.

All water supply wells must have a flow meter installed at a location between the wellhead and the entrance to the distribution system in accordance with the California Waterworks Standards. At the time of the inspection, there was no flow meter installed on the discharge line from the well.

The System must install a flow meter equipped with a totalizer at a location between the wellhead and the entry point to the distribution system as required in the California Waterworks Standards. The system must submit receipts and/or photos as proof of flow meter installation by December 31, 2016. Beginning in January 2017, the System must begin recording the total production from the well at least one time per month and report the monthly production totals to the Division each year on the electronic annual report to the Drinking Water Program (e-AR).

In addition, the well is located in an empty field at the back of the convenience store/market and is surrounded by overgrown by weeds. The System should ensure that the area around the wellhead and the pressure tank are periodically checked and kept free of overgrown weeds and debris. The System should submit photo documentation to the Division by October 31, 2016, showing that the area around the wellhead and pressure tank has been cleared and the overgrown weeds have been removed.

The well discharge piping did not contain a raw water sample tap at the time of the inspection. The System needs to install a raw water sample tap at the wellhead to ensure that water quality samples can be collected prior to the water entering the distribution system. The System needs to provide photo documentation to the Division by December 31, 2016, as proof that the raw water sample tap has been installed.

The electrical box at the wellhead had several openings at the time of the inspection. The System needs to seal all of the opening as well as the area where the electrical conduit enters the wellhead to reduce the potential for contamination from small animals/insects and/or debris entering the wellhead through the electrical box or conduit. The System needs to submit photo documentation to the Division by October 31, 2016, showing that the openings on the electrical box have been sealed.

### 2.3 ADEQUACY OF SUPPLY

No production data is available since there is no flow meter present in the system. As mentioned in section 2.2 above, a flow meter must be installed on the discharge piping from Well No. 1 and the System must begin collecting production data from the well on a monthly basis beginning in January 2017. The System must report the production data annually to the Division through the Electronic Annual Reports. Since the System became a public water system in April 2016, the Division has not received any reports that the System has not been able to maintain system pressure or that the System has experienced water outages. It is assumed that the well is able to produce an adequate supply of water to meet system demands.

### 2.4 TREATMENT

The System does not provide routine treatment of the water produced by Well No. 1. The System is required to have an Emergency Chlorination Plan on file with the Division. The Emergency Chlorination Plan identifies how the System would adequately disinfect the source and the distribution system if there was a bacteriological contamination event. A review of the System's file showed that there was no Emergency Chlorination Plan on file.

An Emergency Chlorination Plan must be developed and submitted to the Division.

Details of what is to be included in the plan can be found in the guidance document attached to this report. The System should use the attached guide to create an Emergency Chlorination Plan and submit it to the Division by October 31, 2016, (Attachment B) for review and approval.

### 2.5 STORAGE AND DISTRIBUTION SYSTEM

No storage is provided for the water system. System pressure is provided through a 119-gallon steel pressure tank located near the wellhead. The steel pressure tank consists of an air compressor to ensure that the system is pressurized to at least 40 psi at all locations. The distribution system consists of 1-½ diameter steel and/or PVC main lines. System pressure is maintained between 40 and 60 psi according to the System and an observation of the pressure gauges during the inspection/sanitary survey.

### 2.6 OPERATION AND MAINTENANCE

The System is owned by Pellegrini Properties. Operation, routine maintenance and all record keeping practices are provided by the owner and the person leasing the convenience store/market, Jaskirat and Nau-Rattan Sidhu. The System is not required at this point to acquire any level of operator certification since no treatment is provided and the system is classified as a transient-noncommunity water system. The System

Pellegrini Properties (El Campo Market) Engineering Report September 2016 Page 5

should ensure that the wellhead and the pressure tank are checked a minimum of one time per month to ensure that the area is not overgrown with weeds. In addition, beginning in January 2017, the System must ensure that the flow meter is read a minimum of one time per month so that the monthly production totals can be reported on the electronic annual report.

### 2.6.1 Cross-Connection Control Program

The Water System is required to monitor for cross connections on a continual basis and ensure there are adequate backflow prevention devices at all possible contamination points. Backflow prevention devices are to be tested and certified by a licensed Backflow Prevention Device Tester on an annual basis. If applicable, submit copies of the results to the Division. At the time of the inspection, the domestic water supply system was being used to supply the irrigation system and it did not appear that adequate cross-connection protection is being provided.

The System must conduct a cross-connection control survey to identify potential hazards by **December 31, 2016**. The system must install backflow prevention devices to prevent possible contamination at locations identified in the survey by January 31, 2017. A cross-connection control guidance document for noncommunity water systems is provided in Attachment C.

### 2.6.2 Complaints

Due to the small size of the water system, complaints are received directly by the owner or the person leasing the property. Once received, the owner diagnoses the complaint and takes whatever actions are necessary to resolve the issue. The Water System must continue to record each complaint received and report that information to the Division on the electronic Annual Report to the Drinking Water Program each year.

### 2.6.3 Emergency Notification Plan

The Water System has an Emergency Notification Plan on file with the Division dated April 4, 2016. The Plan lists Jesse Negyn, Mike Zaro and Dan Gallagher as the contacts to be available in the event of an emergency. In the event of an emergency, the System indicated that they will use the standard method of notification which includes providing notices to all employees and posting the notices in the public places. In addition, the System will notify Merced County Environmental Health Department because of the food facilities in the convenience store/market. The System must update the Emergency Notification Plan any time system personnel changes occur.

### 2.6.4 Bacteriological Sample Siting Plan (BSSP)

The Division did not have a Bacteriological Sample Siting Plan (BSSP) on file for the System. A BSSP was created during the site inspection using available sample locations. The System needs to review the BSSP that was created (Attachment D). If it is acceptable, the System should sign and date the BSSP where indicated and return to the Division. To comply with the California Groundwater Rule's triggered source monitoring, the System must ensure a source sample is collected any time there is a total coliform bacteria positive in the distribution system. One way to ensure this requirement is complied with is to identify the well (Well. No 1) as the third repeat site for each routine distribution system site as indicated on the attached BSSP.

The System must establish a BSSP following the attached guidelines by **September 30**, **2016**. A BSSP has been prepared for you and if it is acceptable to you, please sign and date the attached BSSP (Attachment D) and return to the Division for the system file. The System should also provide a copy of the approved BSSP to the analytical laboratory that is used for conducting bacteriological monitoring.

The System must ensure that five routine bacteriological samples are collected the month following a month that total coliform bacteria is found in a routine distribution system bacteriological sample. In addition, any time the system pressure drops below 5 psi, the System must provide a Boil Water Order (BWO – Tier 1 Public Notification) to all users of the Water System as well as notify the Division and the Merced County Environmental Health Department. The System must remain on the BWO until special investigative bacteriological samples show that the water in the distribution system is free from coliform bacteria. An example of a BWO – Tier 1 Public Notification is attached (Attachment E).

### 2.7 SOURCE WATER QUALITY MONITORING

### 2.7.1 Vulnerability Assessment for Sources

A source water assessment has not been completed for the System's well. A source water assessment is an evaluation of a drinking water source that includes delineation of the boundaries of the source area, identification of Possible Contaminating Activities (PCAs) within the delineated area, a determination of the PCAs to which the source is most vulnerable, and a summary of the vulnerability of the source to contamination. A PCA checklist was completed during the site visit and the source water assessment form will be completed in the near future. A copy of the completed source water assessment will be provided to the System upon completion.

### 2.7.2 Water Quality and Monitoring

The source for this water system currently meets all primary drinking water standards

for the system classification. The Water System must comply with the following ongoing water quality monitoring schedule. All water quality monitoring results obtained in a calendar month must be submitted to the Division by the tenth  $(10^{th})$  day of the following month.

Constituent	Frequency	Date last sampled	Next due date
Bacteriological	Minimum of once every three months	May 17, 2016	August 31, 2016
Nitrate	Once a year	May 17, 2016	May 30, 2017
Nitrite	Once every three years	May 17, 2016	May 30, 2019

All transient-noncommunity water systems are required to monitor for fluoride, iron, manganese, bicarbonate, carbonate, hydroxide alkalinity, calcium, magnesium, sodium, hardness and pH at least one time. A review of the Division's database showed that the System has completed the one time monitoring that is mentioned above with the exception of manganese, iron, magnesium and sodium.

The System must complete the required one time monitoring for manganese, iron, magnesium and sodium monitoring by October 31, 2016. All water quality monitoring results must be submitted electronically via Electronic Data Transfer (EDT) using the primary station code for Well No. 1 (2400340-001). If hard copies of the results from monitoring that has previously been completed are available, the System can submit the hard copies of the results and the Division will ensure that the results get submitted into the Division's WQI database.

Far West Laboratories is contracted to collect and analyze one bacteriological sample quarterly from the hosebib on the west side of the store. The total coliform results are reported as Presence/Absence. It should be noted that Well No. 1 must be analyzed for E. coli bacteria if a routine distribution system sample is positive for total coliform bacteria, as required by the California Groundwater Rule.

Table 1 displays the last bacteriological, nitrate, and nitrite samples collected. The results for the nitrate and nitrite samples were recorded as 3.3 mg/L and 0.40 mg/L, respectfully.

A copy of the water quality monitoring schedule for transient-noncommunity water systems is attached (Attachment F).

### III. APPRAISAL OF SANITARY HAZARDS & PUBLIC HEALTH SAFEGUARDS

Overall, the El Campo Market water supply facilities are in good sanitary condition and appear to be operating satisfactorily under competent supervision. The water produced

Pellegrini Properties (El Campo Market) Engineering Report September 2016 Page 8

by Well No. 1 complies with the applicable primary drinking water standards. The System must complete the remainder of the initial water quality monitoring for manganese, iron, magnesium and sodium by October 31, 2016. The Water System appears to have adequate source capacity since there have not been any low pressure or water outages reported to the Division. Starting January 2017, the System will be able to monitor the total well production monthly.

### IV. CONCLUSIONS AND RECOMMENDATIONS

The El Campo Market Water System meets the definition of a transient-noncommunity water system. It is recommended that a new domestic water supply permit be granted to Pellegrini Properties for the operation of the El Campo Market Water System to continue operation of the existing system subject to the following provisions:

- The permitted active source for the El Campo Market Water System is Well No. 1
  (PS Code 2400340-001). The Merced District Office of the Drinking Water Field
  Operations Branch (DWFOB) must permit all other sources before they can be used
  in the water system.
- 2. The El Campo Market Water System must comply with the attached water quality monitoring schedule for Well No. 1. All water quality monitoring results obtained in a calendar month must be submitted to the Division via electronic data transfer (EDT) by the tenth day of the following month.
- 3. The El Campo Market Water System shall submit plans and specifications for all proposed sources of supply and/or water treatment projects to the Division for review and approval prior to construction.
- 4. The El Campo Market Water System must submit an annual report to the Drinking Water Program each year, documenting specific system information for the prior year. The report shall be in the format specified by the Division and be submitted by the deadline specified by the Division.
- 5. The El Campo Market must monitor the distribution system for total coliform bacteria in accordance with the approved bacteriological sample siting plan (BSSP).
- 6. The El Campo Market must record the water production from Well No. 1 on at least a monthly frequency and report the total yearly production to the Division via the electronic annual report (<a href="http://drinc.ca.gov/ear/home.aspx">http://drinc.ca.gov/ear/home.aspx</a>) at the beginning of each calendar year.
- 7. The El Campo Market must conduct a cross-connection control survey of the water system to identify and locate existing backflow preventers and determine possible contamination locations where backflow preventers would need to be installed. The System must test all backflow prevention devices once a year and conduct a cross-connection control survey once every five years.

Pellegrini Properties (El Campo Market) Engineering Report September 2016 Page 9

Report Prepared By:

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Student Assistant

Attachment A: Inspection Photos – May 10, 2016

Attachment B: Emergency Chlorination Plan Guidelines Attachment C: Cross Connection Control Survey Guidance

Attachment D: Created BSSP/Bacteriological Sample Siting Plan Instructions

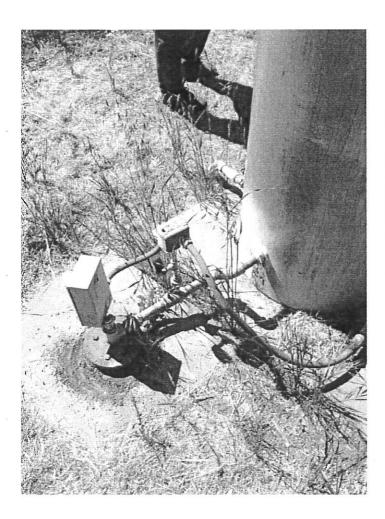
Attachment E: Boil Water Order – Tier 1 Public Notification Template

Attachment F: Water Quality Monitoring Schedule

### ATTACHMENT A:

Inspection Photos – May 10, 2016

Inspection Photos El Campo Market Water System System No. 2400340 May 10, 2016



Picture No. 1: The sole source of supply for the El Campo Market Water System is a well that is located in an empty field behind the market. The area around the well needs to be kept clean to minimize the risk of the well becoming contaminated.

### ATTACHMENT B:

**Emergency Chlorination Plan Guidelines** 





### State Water Resources Control Board

Division of Drinking Water

# State Water Resources and Control Board July 2014

### **EMERGENCY DISINFECTION PLAN REQUIREMENTS**

An emergency disinfection plan, designed to outline procedures in the event of bacteriological contamination, shall be developed and a copy submitted to our office. The plan shall outline specific response procedures for disinfection of wells, pressure tanks, storage tanks and installation of emergency chlorination equipment. Guidance on the operation of the emergency disinfection equipment, to be included in the Emergency Disinfection Plan, is included in the attached document (Emergency Disinfection Plan Guidance).

The plan shall state that the necessary equipment is on-site or readily available and the means by which to connect and activate it have been provided. Those items needed to accommodate emergency chlorination equipment include:

- An all weather, 110 volt electrical receptacle, energized by the well pump operation.
- A three-quarter (3/4) inch threaded tap on the piping downstream of the well check valves for use as a chlorine injection point.
- A sample tap (non-threaded) at least three to six feet downstream of the chlorine injection point.

The plan should further state that qualified personnel (specify who) are under contract to carry out the plan and install, adjust and operate the equipment as necessary. The plan should also include the treatment or distribution operator certification grade and emergency telephone numbers of water system staff and certified operator(s).

Attachment: Emergency Disinfection Plan Guidance

# Emergency Disinfection Plan Guidance for Public Water Systems

The purpose of this Emergency Disinfection Plan (EDP) is to assist utilities implement emergency chlorination. The guidance provided below is designed to facilitate the installation of emergency chlorination equipment and to assist in the setting of chemical dosage in order to maintain acceptable free chlorine residual needed to insure public health protection immediately after a disaster. Items which should be obtained prior to the onset of a disaster include the following equipment:

- 1. Emergency chlorination units.
- 2. Chlorine residual test kits (preferably DPD)
- Granular Calcium Hypochlorite, 65% available chlorine, (liquid sodium hypochlorite has a relatively short shelf life so it is advisable that it not be purchased in advance). Chemicals used for emergency chlorination must be approved under ANSI/NSF<sup>1</sup> Standard 60 (direct additives).

### **Installation Procedures**

A utility should not wait until an emergency has occurred before it attempts to install its emergency chlorination equipment. It is advisable that all field maintenance staff be familiar with the installation procedures in order to quickly install the emergency chlorination equipment. The remainder of this plan addresses the use of hypochlorinators in the event of an emergency. For those utilities which use gas chlorination units, they should already be familiar with their operation if they are using this type of equipment.

The chlorination equipment purchased by the utility must be adequately sized for the proposed installation. The feed capacity of the hypochlorinator should allow the utility to does at a minimum of 5 parts per million free chlorine residual. After the emergency chlorination units have been physically connected to the wells and/or other sources in question, refer to the attached table or use the following procedures to calculate the appropriate settings. If you are unable to perform these calculations, contact a staff of the Drinking Water Program immediately.

The attached tables may be used to mix a solution of a known strength. Decide on a solution strength that you wish to use and find the amount of chlorine needed for a 100 gallon barrel from Table 1.

Table 2 can be used to determine the volume of solution to be added for different flow rates for each mg/L of chlorine dosage. It should be recognized that large capacity wells will need stronger solution strengths or the feed barrel will need to be filled too frequently. The volumes in table 2 are in gallons per day (gpd). If the feed pump capacity is given in gallons per hour, then the volume from Table 2 must be divided by 24 to give a gph value.

To determine the appropriate pump setting, the value from Table 2 must be divided by the feed pump capacity.

Example:

Feed Pump Capacity = 10 gph; Q = 1500 gpm; 7% solution; 5 mg/L dosage

From table 2  $\rightarrow$  Chlorine Volume = 30.9 gpd for each mg/L.

For 5 mg/L  $\rightarrow$  5 x (30.9) = 154.5 gpd

Since feed pump has a maximum capacity of 10 gph, the appropriate length of stroke setting is:

$$\frac{154.5 \times 24}{10 \text{ qph}} = 0.64$$

Outlined below are the equations to use if the Tables are not used:

1. A solution barrel of a known volume must be obtained. The barrel should be filled with a known volume of water. To this volume, a known weight of chemical should be added. The solution strength must be determined using the equation given below:

% solution =  $\frac{\text{Weight of chemical added to solution barrel (lbs)}}{\text{Weight of water in solution barrel (lbs)}} \times 100$ 

(1 gallon of water weighs 8.34 lbs)

A 6% solution can be obtained by adding one half pound of chemical per gallon of water using a 100 gallon barrel. (see below):

$$50 / (100 \times 8.34 \text{ lb/gal of water}) \times 100 = 5.99 \text{ or } 6\%$$



To calculate the pounds per hour of chemical that must be added to obtain a know chlorine concentration, the following equation must be used:

### Equation #1:

lbs per hour of chemical =  $8.34 \times \text{desired dosage in ppm} \times \text{flow rate in gpm} \times 60 \text{ min}/1,000,000$ 

Assuming the desired dosage is 5 ppm that gives the following equation:

Equation #2: Ibs per hour of chemical =  $2.5 \times 10^{-3} \times \text{flow rate in gpm}$ 

Next you must determine the required gallons per hour of chemical to be added. This must be obtained using the following equation:

### Equation #3:

gallons per hour of chemical = lbs per hour / 8.34 / solution strength / 100 (from above)

Once this value has been obtained, then the next step is to review the maximum feed rate in gallons per day of the chemical feed pump. This is generally printed in a label attached to the pump and it may specify the discharge pressure this maximum rate applies to. Most chemical feed pumps have either a length of stroke setting or two settings for frequency of stroke and length of stroke. To determine what settings should be used, a review of the instrumentation on the pump must be conducted.

If two control settings are provided, then set the frequency control at 100% and provide adjustment only to the length of stroke adjustment. The equation to be used to determine at what setting the length of stroke should be, is given below:

Percent length of stroke = gallons per hour (obtained above) x 24 x 100 / the pump capacity in gpd

This numerical setting should be used when adjusting the pump. If both pump settings are to be changed from 100%, then the percent stroke equation is as follows:

Percent length of stroke = gallons per hour  $\times$  24  $\times$  100 / stroke frequency / pump capacity in gpd A check on the actual dosage can be performed by using the total gallons of solution pumped within a known operating period. That information can be used as follows:

Actual Dosage = <u>gallons of solution x solution strength</u>
gallons of water treated in MG

An easier way to use hypochlorination equipment is to have calibration or volumetric feed cylinders installed on the intake line to the pump. If these cylinders are available, then a known volume of solution can be pumped and the time it takes to pump that volume is used to determine gallons per hour at a known discharge pressure. The actual percent solution must still be known to conduct the other calculations.

Once a utility has implemented emergency chlorination of their system, it is important to conduct follow up distribution chlorine residual monitoring to determine the effectiveness of the chlorination process. In the event of an emergency, hypochlorination equipment should be used to dose the system at 2 ppm of free chlorine residual. Chlorine residual monitoring within the distribution system should take place to verify that an adequate residual is being obtained

at all locations within the distribution system. Any areas which have suppressed chlorine residuals should receive further investigation to determine whether or not there are other problems associated with the reduced residuals.

Flushing should be provided if possible, to draw the chlorinated water into the distribution system as soon as possible.

In addition to the chlorine residual monitoring, bacteriological sampling of the distribution system in all areas should be conducted. Chlorine residual monitoring in addition to bacteriological sampling should be used to further define areas of distribution system that need additional investigation. Chlorination of the system should continue until it has been verified that no structural problems exist within the distribution system and all bacteriological monitoring shows that there is no presence of pathogenic organisms.

TABLE 1
AMOUNT OF CHLORINE PER 100 GALLON BARREL\*

	Solution Strength	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%
Type of Chlorine												
5% Sodium Hypochlorite**		60 gal	80 gal	100 gal								
12.5% Sodium Hypochlorite**		24 gal	32 gal	40 gal	48 gal	56 gal	64 gal	72 gal	80 gal	88 gal	96 gal	
65% Calcium Hypochlorite***		38 lbs	51 lbs	64 lbs	77 lbs	90 lbs	103 lbs	116 lbs	128 lbs	141 lbs	167 lbs	

<sup>\*</sup> Add the quantity indicated to the 100 gallon barrel and then fill the remaining volume with water.

1: American National Standard Institute (ANSI) or National Sanitation Foundation (NSF)

### \*\*\* HTH, tablets or granular chlorine

\_\_\_\_\_

For 10% solution using 12.5% sodium hypochlorite, use 80 gallons of

sodium hypochlorite and add 20 gallons of water.

Example:

For 10% solution using 65% available Calcium Hypochlorite (CaHOCI), use

128 lbs of granular chlorine and add water to fill barrel and mix.

<sup>\*\*</sup> The sodium hypochlorite must be ANSI/NSF¹ certified for potable drinking water and approved as direct additive (ANSI/NSF Standard 60).

TABLE 2
CHLORINE VOLUME REQUIRED GALLONS PER DAY (GPD) PER MG/L OR PPM OF DESIRED CHLORINE DOSAGE\*

	Solution Strength	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%
Flow Rate												
50 gpm		2.4	1.8	1.4	1.2	1.03	0.9	0.8	0.7	0.7	0.6	0.6
75 gpm		3.6	2.7	2.0	1.8	1.5	1.4	1.2	1.0	1.0	0.9	0.8
100 gpm		4.8	3.6	2.9	2.4	2.0	1.8	1.6	1.4	1.3	1.2	1.1
300 gpm		14.4	10.8	8.6	7.2	6.2	5.4	4.8	4.3	3.9	3.6	3.3
500 gpm		24.0	18.0	14.4	12.0	10.3	9.0	8.0	7.2	6.6	6.0	5.5
800 gpm		38.4	28.8	23.0	19.2	16.5	14.4	12.8	11.5	10.5	9.6	8.9
1000 gpm		48.0	36.0	28.0	24.0	20.6	18.0	16.0	14.4	13.1	12.0	11.1
1500 gpm		72.0	54.0	43.2	36.0	30.9	27.0	24.0	21.6	19.6	18.0	16.6
2000 gpm		96.0	72.0	57.6	48.0	41.1	36.0	32.0	28.8	26.2	24.0	22.2

<sup>\*</sup> Values in the Table are the flow rates in gallons of solution per day that be added for each mg/L of desired dosage.

Example:

Well Discharge = 1,000 gpm

Solution Strength = 5%

Desired Dosage = 5 mg/L or 5 ppm

From Table 2, Need to add 28.8 gpd per mg/L (or ppm)

Therefore,  $5 \text{ mg/L} \times 28.8 \text{ gpd/(mg/L)} = 144 \text{ gpd.}$ 

### ATTACHMENT C:

Cross Connection Control Survey Guidelines for Noncommunity Water System

# CROSS-CONNECTION CONTROL NON-COMMUNITY WATER SYSTEMS

SWRCB - Division of Drinking Water-MERCED DISTRICT

### Purpose of Cross-Connection Control Program

Water provided by a public water system may be contaminated via cross-connections within the user's distribution system. The purpose of the cross-connection control program is to eliminate actual cross-connections and to reduce the hazard of potential cross-connections. This is accomplished by identifying actual and potential cross-connections and either installing appropriate backflow prevention assemblies or ensuring that water-using equipment is installed in accordance with plumbing code requirements and good practice.

### What are cross-connections?

Cross-connections are unprotected connections between a potable water system and any source or system containing unapproved water or a substance, which is not safe. Examples of cross-connections include:

- Improperly installed irrigation systems (which may allow back siphoning of stagnant, bacterially contaminated water into the piping system) or premises where there are irrigation systems into which fertilizers, herbicides, or pesticides are or can be injected.
- 2. Improperly plumbed water-using devices such as hot tubs, boilers or commercial dishwashers.
- Irrigation systems served by an auxiliary source, such as an unapproved well or a creek. Such systems, if connected to the drinking water system, create a potential for contamination via cross-connections.
- 4. Interconnections between the potable system and a non-potable system.

### How to Comply

For Non-community water systems, the program consists of identification of hazards and protection of the system from these hazards. The program is to be adapted to the size and complexity of the system. The following are the required elements and necessary actions:

- Identification of Hazards -This consists of a review of the system facilities to identify areas of
  potential contamination via cross-connections. A survey of the system is to be conducted with
  documentation of the findings. Any facilities that handle wastewater or hazardous liquids
  require special evaluation to ensure protection of the potable system from contamination.
- 2. <u>Protection of System</u> -Taking action to abate the potential cross-connection by ensuring compliance with plumbing codes, installing and maintaining appropriate backflow prevention assemblies and other means. This includes annual testing and repair or replacement as needed.

### Completion and Documentation

Attached is additional information and forms that you can use to help guide you through this program. A survey of the system is to be conducted by a qualified person. Documentation of the survey findings is to be maintained and submitted to the Division when requested.

### Attachments - Information and forms for surveys

Notes: 1. Regulatory Authority: Pursuant to Section 7584 of the California Code of Regulations, which states, "The water supplier shall protect the public water supply from contamination by implementation of a cross-connection control program".

2. Applicability: Non-community water systems

## ELEMENTS OF A CROSS-CONNECTION CONTROL PROGRAM SWRCB Merced District

When implementing a Cross-Connection Control Program, the water supplier or health agency should follow an organized plan. The following items should be included as a minimum. The items explain the Division of Drinking Water's policy regarding the regulations.

### 7584. Responsibility and Scope of Program

The water supplier shall protect the public water supply from contamination by implementation of a cross-connection control program. The program, or any portion thereof, may be implemented directly by the water supplier or by means of a contract with the local health agency, or with another agency approved by the health agency. The water supplier's cross-connection control program shall for the purpose of addressing the requirements of Sections 7585 through 7605 include, but not limited to, the following elements:

- (a) The adoption of operating rules or ordinances to implement the cross-connection program.

  A public water supplier shall enact an ordinance or rule of service outlining the cross-connection control program and providing enforcement authority.
- Water utilities do not have any responsibility for controlling or abating cross-connections on a user's premises. All existing facilities where potential cross-connections are suspected, however, shall be listed and inspected or reinspected on a priority basis, where feasible. All applications for new services or for enlarging existing services or changing of occupant shall be reviewed or screened for cross-connect1ons hazards. Surveys are intended to be conducted by a person certified by AWWA or ABPA as a cross-connection specialist. A list of persons that have this certification may be obtained by contacting AWWA at (909) 481-7200, ABPA at <a href="http://www.abpa.org/">http://www.abpa.org/</a>, or by contacting the SWRCB-Merced District office.
- (c) The provision of backflow protection at the user's connection or within the user's premises or both.

Adequate provisions for implementation and enforcement of backflow protection where needed including the shutting off service when necessary

(d) The provision of at least one person trained in cross-connection control to carry out the cross-connection program.

Specific units of the health agency and/or water supplier should be designated to organize and carry out the cross-connection control program. The personnel in those units should be trained as to the causes and hazards of unprotected cross-connections.

(e) The establishment of a procedure or system for testing backflow preventers.

A list of approved backflow preventers and list of certified testers should be made available to each water user required to provide backflow protection.

The list may include backflow devices approved by University of Southern California, Foundation for Cross-Connection Control and IAPMO, which may be found on the SWRCB website at the following address:

### http://www.swrcb.ca.gov/certlic/drinkingwater/Pages/Publications.aspx

The List of certified testers may be lists developed by the American Water Works Association and local county health agencies.

Backflow preventers should be tested at least yearly or more often as required by the health agency or water supplier.

- (f) The maintenance of records of locations, tests and repairs of backflow preventers

  Adequate records should be kept and filed for reference. These records should include, in addition to the name of the owner of the premises, the:
  - a) Date of inspection
  - b) Results of inspection
  - c) Required protection
  - d) List of all backflow preventer devices in the system
  - e) Test and maintenance reports
  - f) All correspondence between the water supplier, the local health authority, and the consumer
  - g) Records must be maintained for a minimum of three years

### Records of inspection and testing should be evaluated to determine if:

- a) Devices are frequently or sufficiently reviewed to detect failure.
- b) There are unusual feature of a particular model of device or component.
- c) Cause of failure can be eliminated.

A program should be established to notify the water user when his backflow preventer must be tested. (A minimum of once each year is required.) After installation or repair, a backflow preventer should be tested and approved before it is accepted.

### 7605. Testing and Maintenance of Backflow Preventers

Regulations require the following regarding testing and maintenance of backflow prevention devices:

- (a) The water supplier shall assure that adequate maintenance and periodic testing are provided by the water user to ensure their proper operation.
- (b) Backflow preventers shall be tested by persons who have demonstrated their competency in testing of these devices to the water supplier or health agency.
- (c) Backflow preventers shall be tested at least annually or more frequently if determined to be necessary by the health agency or water supplier. When devices are found to be defective, they shall be repaired or replaced in accordance with the provisions of this Chapter.
- (d) Backflow preventers shall be tested immediately after they are installed, relocated or repaired and not placed in service unless they are functioning as required.
- (e) The water supplier shall notify the water user when testing of backflow preventers is needed. The notice shall contain the date when the test must be completed.
- (f) Reports of testing and maintenance shall be maintained by the water supplier for a minimum of three years.

### GUIDELINES FOR CROSS-CONNECTION CONTROL FOR IRRIGATION SYSTEMS

Summary: Public water systems must be protected from actual and potential cross-connections between irrigation systems and domestic water systems. This is accomplished by ensuring that the irrigation system is installed in accordance with the requirements of the Uniform Plumbing Code with appropriate backflow prevention devices.

Special Conditions: For systems with an unapproved auxiliary source serving the irrigation system, additional protective action is necessary to guard against introduction of water from the auxiliary source into drinking water system. The following actions must be taken to guard against this hazard:

- 1. Identify all interties between the domestic system and the irrigation system.
- Either disconnect these interties or install approved backflow prevention devices at each intertie. A Reduced Pressure Principle backflow prevention device is the type of device, which is to be installed.
- 3. Verify that there are no other interconnections between the domestic and irrigation systems. This is accomplished by draining the irrigation system and verifying that it does not refill with water from the domestic system through an undetected cross-connection. This procedure should be repeated on a period basis (once every three months).

Records: Maintain written records of dates of tests, procedures, results and corrective actions taken.

# CROSS-CONNECTION SURVEY SUMMARY FORM NON-COMMUNITY WATER SYSTEMS

System Name	Number
Date of Survey	_
Name of person performing survey	
Qualifications of person performing survey	
Description of Survey (Elements of survey, how conduct	ted, hazards identified):
Actions taken (Include description of corrections, backflo	
Long-term (Include description of who will ensure ong connections and testing of backflow prevention assemble	
Other (Include other elements of program):	
Name of person completing this report	Date

### ATTACHMENT D:

Bacteriological Sample Siting Plan and Guidelines

# BACTERIOLOGICAL SAMPLE SITING PLAN FOR SMALL WATER SYSTEMS

System No.:	System No.: 2400 540		System Name: Pelle	System Name: Pellegrin, Properties - El Campo Market	o market
PWS Classification:	cation: TNC	()	No. Mc	No. Monthly Users: Daily Users:	s: 25t
No. Active St	No. Active Service Connections:	ons: 2	Sampli	Sampling Frequency: 1/Q+C	
Name of Trai	Name of Trained Sampler:	Fay West	+ Labs	Analyzing Lab: Fax West Cabs	rest labs
Person respo	nsible to report	9		CDPH: Mi Ke Zaro Day/Evening Phone	Day/Evening Phone No: 408 -416 - 5170
Signature of	Signature of Water System Representative:	Representative:		Date: 5/24/14	,
Sample ID	Sample Type	Sample Point	Location of Sample Point	Address of Sample Point	Months Sample Collection at this Location
1-ROU	Routine	118	HB-Side wall	Autside HB-Side of Store	May, Aug, Nov, Feb.
1-REP1	Repeat	五	FB	Front HB - warehouse	Repeat Sample Only
1-REP2	Repeat	Sink	Sink	Mynmen's Restroom-Store	Repeat Sample Only
1-REP3	Repeat	去	WH	Well No. 1	Repeat Sample Only
2-ROU	Routine	HS Sink Sink	Sink	Lumen's Restroom in Stare	Following Tctonly
2-REP1	Repeat	拓	78	Front HB - Warrehouse	Repeat Sample Only
2-REP2	Repeat	Sink	Sink	Kitchen Sink- Store	Repeat Sample Only
2-REP3	Repeat	お	HCM	Well No. 1	Repeat Sample Only
3-ROU	Routine	bink	sink	Kitchen Sink in Store	to Ilouring Tc touly
3-REP1	Repeat	表	FES	outside HB-Side a store	Repeat Sample Only
3-REP2	Repeat	#	石	Back HB- warehouse	Repeat Sample Only
3-REP3	Repeat	拉	HOH	Well No. 1	Repeat Sample Only
4-ROU	Routine	あ	る	Front HB - Warehouse	Following TC + Only
4-REP1	Repeat	五	丢	Back 445 - Ware horuse	Repeat Sample Only
4-REP2	Repeat	£	丢	rutside HB - Side of Store	Repeat Sample Only
4-REP3	Repeat	五	WIT	Well No. 1	Repeat Sample Only
5-ROU	Routine	五	ま	Back HB- Warehouse	Following TC anly
5-REP1	Repeat	无	Æ	outside HB - Storker	Repeat Sample Only
5-REP2	Repeat	HB	HS	Front HB - warehouse	Repeat Sample Only
5-REP3	Repeat	#5	27	well Not no me	Repeat Sample Only
If chlorine is	being used, is it	If chlorine is being used, is it used on a continuous basis?	Yes	No 🔀	
				The second secon	



### State Water Resources Control Board

Division of Drinking Water

### DRINKING WATER FIELD OPERATIONS BRANCH - MERCED DISTRICT

# GUIDELINES FOR COMPLETION OF THE BACTERIOLOGICAL SAMPLE SITING PLAN

(For systems collecting four or fewer routine samples per month)

The total coliform regulation requires the water supplier to submit a bacteriological sample siting plan to the Division for review and approval. The locations where samples are to be collected must be written down and formally approved by the Division. These guidelines and Attachments B and C, "Bacteriological Sample Siting Plan" forms, are to assist you in complying with these requirements.

To comply with the requirements for submitting a Bacteriological Sample Siting Plan, two (2) items must be submitted to the Division at this time.

- 1. A system map, street map, or system schematic showing all sampling locations must be submitted. The map can be prepared by any system representative. It does not have to be prepared by an engineer. The following are to be shown on the map:
  - Water Sources (i.e., well or spring)
  - Treatment Facilities (i.e., chlorination)
  - Storage Tanks
  - Pressure Reducing Stations
  - Booster Stations
  - Pressure Zones
  - Dead Ends
  - Service Area Boundaries
  - Routine Sample Sites
  - Repeat Sample Sites
  - Special Sample Sites
  - 2. Complete either Attachment B or C, the "Bacteriological Sample Siting Plan" form, and return the system map and form to the Division for review and approval. The use of either Attachment B or C depends on the number of repeat samples required. Refer to pages 2 and 3 below in "How many repeat sampling sites are required?"

3. Once the Bacteriological Sample Siting Plan has been approved by the Division, copies should be provided to the person responsible for sample collection, the laboratory and the person responsible for reporting coliform-positive samples to the Division.

### Selection of Sampling Sites

The routine sampling sites chosen must be representative of the water distribution system including all pressure zones, areas supplied by each water source and distribution reservoir.

<u>Looped Systems</u>: If your entire water distribution system is looped, then one routine sample point may be representative of your system, assuming valves are open.

<u>Pressure Zones</u>: You should only be concerned about sampling in different pressure zones if your water system serves different areas of varying elevations, for example in mountainous areas.

### How many routine sampling sites are required?

A minimum of five (5) routine sampling sites must be selected and indicated on your map and sampling plan form. If your water system is required to collect <u>less than 5 routine samples a month</u>, then 5 routine samples must be collected the month following any <u>coliform positive sample</u>. This is the reason for identifying 5 routine sites in your plan.

If the water system is not adequately represented by 5 routine sample locations, you may identify additional locations and collect more than one sample per month. Each site identified should be rotated for sampling at least every three months.

### How many repeat sampling sites are required?

Either complete **Attachment B** if your system collects **one or fewer** samples per month, a repeat sample set is consists of <u>four</u> samples to be collected from the following locations:

- One repeat sample from the same routine location.
- One repeat sample from an *upstream location*. (within 5 connections of the routine site)
- One repeat sample from a *downstream location*. (within 5 connections of the routine site)
- One sample from *some other location*.

  (within 5 connections upstream or downstream of the routine site or a well site[see Attachment A])

or complete **Attachment C** if your system collects **more than one** routine sample per month, a repeat sample set consists of <u>three</u> samples from the following locations:

- One repeat sample from the same routine location.
- One repeat sample from an upstream location. (within 5 connections of the routine site)
- One repeat sample from a downstream location. (within 5 connections of the routine site)

What if the water system does not have enough locations to select the required number of routine and repeat sample sites?

If the water system does not have enough sample locations to identify 5 routine sites and 3 to 4 repeat sites per routine, you may either (1) identify fewer than 5 routine sites as long as the sampling adequately reflects water quality in the distribution system, or (2) use some of the routine sites as repeat sites for other routines (i.e., double up on use of available sites).

### Pointers for Sample Site Selection

- When selecting a routine sample site you should be able to select a site upstream and a site downstream for repeat sampling.
- Select a site where the water is used continuously all year round.
- Pick a site that is easily accessible, i.e., a fenced yard with a locked gate and vicious dog is not a good selection.
- When choosing a sampling tap you should consider these factors:

The sampling tap should be located in as clean an environment as possible. It should be protected from contamination by humans, animals, airborne materials or other sources of contamination.

If you choose an outside private tap, it should be one that is in frequent use, clean, and at least  $1\frac{1}{2}$  feet (18 inches) above the ground. The sample tap should discharge downward.

If you choose an inside tap, be sure that you are not sampling from drinking fountains, taps which have aerators or strainers, or swivel faucets, or taps off of individual homeowner treatment units.

Do not choose a fire hydrant as sampling tap.

Avoid taps that are surrounded by excessive foliage or taps that are dirty or corroded.

Avoid taps that leak, have fittings with packing, or have permanent hoses or attachments fastened to the tap (Never collect a sample from a hose).

Avoid the use of dead ends for routine sample collection, and use for repeat samples only of no other sample sites are available and if there is continuous water use from a service off the dead-end.

### <u>Instructions for Completing the</u> Bacteriological Sample Siting Plan Form

This form has been designed to include all the requirements for the Bacteriological Sample Siting Plan.

### PWS Classification

The public water system (PWS) classification for your water system is either community, nontransient noncommunity or transient noncommunity. This classification determines the type and frequency of all water quality testing. If you are uncertain of your classification, contact the Division.

### Month/Daily Users

The <u>monthly population</u> determines the frequency of bacteriological sample collection for community water systems. The <u>daily population</u> determines the frequency of sample collection for transient and nontransient noncommunity systems.

### Active Service Connections (Community water systems only)

This is the number of active hook-ups served by the system. If your system has a hook-up to a vacant lot, do not count this as an active connection. If a vacant lot has a right to a future connection, do not count this an active connection. If a residence is connected to the system, but the residence is vacant, count this as an active hook-up.

### • Distribution Sampling Frequency

This is the minimum number of routine bacteriological samples required at the frequency specified. If any routine sample is positive for coliform bacteria, additional repeat samples will be required. Repeat samples are <u>in addition</u> to the required routine samples. If you are uncertain of the routine sampling frequency for your water system, contact the Division. Attachment A provides the minimum frequency based on type of water system. This will be increased if more than 1,000 people have been served on a daily basis.

A coliform-positive sample will increase the routine monitoring for a small system the following month. A system normally collecting less than 5 routine samples per month which has a coliform positive sample must collect a minimum of five (5) routine samples the following month.

### Source Sampling Frequency

This is the amount of bacteriological sampling that the water system is going to collect from each source (well, surface water-raw, spring, etc.) per month or quarter. Source sampling is required at a specified frequency when the water system continuously treats (i.e. chlorination) the water or has a surface water treatment plant.

### • Water Treatment

This is the type of water treatment that the water system applies to the water that is entering the distribution system. If your water system does not provide water treatment, then write N/A.

### • Trained Sampler

The person collecting samples must be trained.

<u>Sampling Service</u>: Water systems utilizing a certified laboratory or other sampling service for water sample collection will be considered to have trained samplers. Enter the name of the laboratory or sampling service collecting your samples. A copy of the approved Bacteriological Sample Siting Plan should be provided to the laboratory or sampling service, if one is used.

Other Trained Samplers: Any person receiving a certificate from AWWA for attendance of the Water Sampling Training should submit a copy of their certificate along with the completed form. Any other samplers should submit a statement of their experience and training to this Division for approval.

### Analyzing Lab

Enter the state certified laboratory which will be analyzing your water samples.

### Person Responsible to Report Coliform-Positive Samples to DIVISION

This should be the person that the laboratory is required to contact when a sample is total or fecal coliform positive. This person must notify the Division within 24 hours of a violation of the total coliform standard (more than one positive sample in a month) or when any sample is fecal or *E. coli* positive. This person should have the authority to take corrective action as required by regulation and the Division. This should be the same person listed on your Emergency Notification Plan. Refer to Attachment A for additional instructions related to follow-up to positive samples. Please note: Regulation now requires the water supplier to require the laboratory immediately notify the Division of any positive bacteriological result if the laboratory cannot make direct contact with water system's designated contact person within 24 hours. We recommend you provide a copy of your emergency notification plan to your laboratory.

### Day/Evening Phone Number

The Division requires that the water system provide the phone numbers of the person listed above so that they can be contacted by the laboratory or the Division at any time during the day or evening in the event of a bacteriological emergency.

### Signature and Date

The person preparing the Sample Siting Plan should sign and date the plan. If the Division has questions regarding the sampling plan, this is the person to be contacted.

### • Sample ID

This should be entered on the laboratory slip when the sample is turned into the laboratory. This is the unique identifier for the water sample location or the location address may also be used.

For systems collecting one or fewer routine samples per month, a minimum of five (5) routine sampling sites with three (3) repeat sampling sites for each routine sample locations must be listed. Use the **Attachment B** plan form.

For systems collecting more than one routine sample per month, a minimum of five (5) routine sampling sites with two (2) repeat sampling sites for each routine sample location must be listed. Repeat sample sites are to be located within five (5) service connections upstream and downstream of the routine sample site. Use the **Attachment C** plan form.

All sample locations should be marked in some way with the <u>Sample ID or location address</u>, i.e., the code painted on the sampling location or tagged with a water proof tag so the person collecting the water sample is sure to collect the water from the correct sample locations.

### • Sample Type

This describes what type of sample (routine or repeat) is to be collected at this location.

### Sample Point

This is the type of the sample location. Use the following abbreviations, when appropriate.

SF Sink Faucet

PC Goose Neck Type Copper Tube with Pet Cock

### Location of Sample Point

This is the description of the area in the distribution that the sample site is located. Routine sample sites shall not be located at dead ends.

DE Dead End (Not Recommended)

PZ Pressure Zone

RD Representative Distribution

### Location Address

This is the actual physical location where the water sample is to be collected. If possible use a street address, i.e., 103 Good Street. If the location does not have a street address use the nearest crossroads or use the last name of the resident, i.e., "Brown Residence." If the location is a business, please list the business name and address.

When describing the location, keep in mind that the person collecting water samples must be able to locate the sample site from your description.

### • Months Sample Collected at This Location

This is the schedule for routine samples to be collected. For example, suppose two (2) sites are representative of your systems. Site No. 1 will be sampled in January, March, May, July, September, and November. Site No. 2 will be sampled in February, April, June, August, October, and December. All routine sites identified should be rotated to allow sampling at least every 3 months.

SWS BSSP INSTRUCTIONS 03-2005

# BACTERIOLOGICAL MONITORING REQUIREMENTS For Water Systems collecting 4 or fewer routine samples

### 1. Minimum Monitoring Frequency

Monthly	/ Pop	ulation Served	Service	Conr	<u>nections</u>	Minimum Frequency
25	to	1,000	15	to	400	1 per month
1,001	to	2,500	401	to	890	2 per month
2,501	to	3,300	891	to	1,180	3 per month
3,301	to	4,100	1,181	to	1,460	4 per month

Increased monitoring frequency may be required if there is more than one pressure zone in the distribution system or multiple sources or storage reservoirs. If your system is providing continuous chlorination treatment, closely review Item 6 below.

### 2. Routine and Repeat Sampling

All **routine samples** should be collected from the distribution system (<u>not from the well</u>) at locations specified in an approved Bacteriological Sample Siting Plan. If such a plan has not been prepared for your water system, contact the Division for assistance.

### 3. Repeat Monitoring After a Coliform-Positive Sample

Notification of a Coliform-Positive Sample - The water system shall require the laboratory to notify the system within 24 hours if any sample is coliform-positive. The water system must collect a repeat sample set within 24 hours of notification of the coliform-positive sample. If the sample is fecal coliform or E. Coli positive, the water system should contact the Division immediately.

<u>Please note</u>: Regulation now requires the water supplier to require the laboratory immediately notify the Division of any positive bacteriological result if the laboratory cannot make direct contact with the water system's designated contact person within 24 hours. We recommend you provide a copy of your emergency notification plan to your laboratory.

Repeat Sampling - For systems collecting only one (1) sample per month or quarter, a repeat sample set shall consist of four (4) samples as follows: one (1) from the routine sample site at which the positive occurred, one (1) from the upstream repeat sample site, one (1) from the downstream repeat sample site and one (1) from the operating well or another location within the system that would best help to identify the source or area of contamination.

For systems collecting **more than one (1)** sample per month, a repeat sample set shall consist of three (3) samples as follows: one from the routine sample site at which the positive occurred and two from the upstream and downstream repeat sample sites.

The repeat sample sites shall be located within five service connections upstream and downstream of the routine site as identified in the Bacteriological Sample Siting Plan. At least one repeat sample shall be collected from upstream and one from downstream unless there is no upstream or downstream service connection. Contact the Division as soon as the results of the repeat samples are obtained.

The following criteria should be considered when determining where to collect the fourth repeat sample:

- For systems with only one active well and do not provide continuous chlorination, the sample may be collected at the wellhead.
- For systems with more than one active well, it may not be possible to determine which well was serving the area where the positive routine sample was collected.
   For these systems, the fourth repeat sample should be collected at a storage tank or another point in the distribution system.
- For systems providing continuous chlorination, the system should already be conducting raw-water bacteriological monitoring at a point ahead of chlorination on at least a quarterly basis. These samples should be used to determine if the source of bacteriological contamination is from the well itself. For these systems, the fourth repeat sample should be collected at a storage tank or another point in the distribution system.
- Contact the Division for assistance.

If any of the above criteria would result in a change or revision to your existing bacteriological sample-siting plan, you must first submit a revised plan to our office for review and approval before implementing any such change or revision.

Any additional samples collected from the well(s) for investigative purposes (not part of the repeat sample set) should be labeled as "special" samples (or "other" samples), and will not be counted towards compliance with the monthly total coliform water quality standards.

Sampling the Month Following a Coliform-Positive Sample - If a public water system for which fewer than five routine samples/month are collected has one or more total coliform-positive samples, the water supplier shall collect at least five routine samples the following month. These samples can be collected on the same day from five different routine sites or from the same routine sites at 15 minute intervals (if fewer than five sites are available). If all five samples are negative for total coliform, the water system may return to the normal sampling frequency during the next sampling period.

### 4. Determining Compliance with the Coliform Standard

A public water system will fail the coliform maximum contaminant level (MCL) if: For a public water which collects fewer than 40 samples per month, at least two samples collected in the same month are coliform-positive. When this occurs, the water system representative shall contact the Division immediately (within 24-hours or the next business day if the office is closed). The water system will be required to conduct public notification and will be provided with an approved notification to be used. Public notification shall be conducted by direct mail, hand delivery or posting (where approved).

### 5. Monthly Reporting of Coliform Monitoring Results

The analytical results of all coliform monitoring shall be reported to the Division by the 10th day of the month following sample collection. The water system can request the laboratory to provide the results to the Division; however, the water system is ultimately responsible to ensure that the sample results were received. If the water delivered to your water system is provided with a disinfection treatment, the chlorine residual should be measured and reported at the same time and location(s) that the bacteriological sample(s) are collected. This residual must be provided to the Division on the laboratory analysis report at this time. Beginning January 1, 2004, EPA's Disinfectant/Disinfection By-Product (D/DBP) Rule will require this reporting to our Division.

### 6. Bacteriological Monitoring of Wells (for systems chlorinating)

Water systems that are routinely chlorinating the water supply are required to sample the raw well water for coliform bacteria. Initially, a minimum of six consecutive monthly samples must be collected from the well discharge. The samples must be collected at a location ahead of chlorination. After six consecutive monthly samples do not show the presence of coliform bacteria, the water system may request a reduction in sampling to one sample per quarter. The laboratory should be instructed to determine the most probable number of coliform (MPN) for well samples. The results of all samples shall be submitted to the Division.

SWS BSSP INSTRUCTIONS 03-2005.DOC

# ATTACHMENT B (see p. 6 of instructions) BACTERIOLOGICAL SAMPLE SITING PLAN

			DUCTOR	DACTEMODOGICAL SAIM DE STILLOT LAN	THE TOWN	
System No.:	¥		System Name:			
PWS Classification:	cation:		_	No. Monthly Users:	Daily Users:	
No. Active Se	No. Active Service Connections:	ons:		Distribution Sampling Frequency:	quency:	
Source Samp	Source Sampling Frequency: Following TC+	Following TC+			Continuous Water Treatment:	reatment:
Name of Trai	Name of Trained Sampler:				Analyzing Lab:	
Person respor	sible to report or	Person responsible to report coliform-positive samples to Division	mples to Division		Day/E	Day/Evening Phone No.:
Signature of	Water System F	Signature of Water System Representative:			Date:	
Sample ID	Sample Type	Sample Point	Location of San Point	Sample Addres	Address of Sample Point	Months Sample Collection at this Location
1-ROU	Routine					Quarterly: Mar., June, Sept., Dec.
1-REP1	Repeat					Repeat Sample Only
1-REP2	Repeat					Repeat Sample Only
1-REP3	Repeat					Repeat Sample Only
2-ROU	Routine					
2-REP1	Repeat					Repeat Sample Only
2-REP2	Repeat					Repeat Sample Only
2-REP3	Repeat					Repeat Sample Only
3-ROU	Routine					
3-REP1	Repeat					Repeat Sample Only
3-REP2	Repeat					Repeat Sample Only
3-REP3	Repeat					Repeat Sample Only
4-ROU	Routine					
4-REP1	Repeat					Repeat Sample Only
4-REP2	Repeat					Repeat Sample Only
4-REP3	Repeat					Repeat Sample Only
5-ROU	Routine					
5-REP1	Repeat					Repeat Sample Only
5-REP2	Repeat					Repeat Sample Only
5-REP3	Repeat					Repeat Sample Only

If the water system has one or more total coliform-positive samples, at least five routine samples will be collected the following month.

# ATTACHMENT C (see p. 6 of instructions) BACTERIOLOGICAL SAMPLE SITING PLAN

				DISTRICT OF STATE STATE OF STA	C T TOTAL	
System No.:			System Name:			
PWS Classification:	ation:		No. M	No. Monthly Users:	Daily Users:	:s:
No. Active Ser	No. Active Service Connections:	ons:	Distrik	Distribution Sampling Frequency:	y:	
Source Sampling Frequency:	ng Frequency:			0	Continuous Water Treatment:	nent:
Name of Trained Sampler:	ed Sampler:			4	Analyzing Lab:	
Person respons	sible to report co.	Person responsible to report coliform-positive samples to DIVISI	nples to DIVISION:		Day/Evening Phone No.:	ione No.:
Signature of V	Signature of Water System Representative:	epresentative:			Date:	
Sample ID	Sample Type	Sample Point	Location of Sample Point	Address of S	Address of Sample Point	Months Sample Collection at this Location
1-ROU	Routine					
1-REP1	Repeat					Repeat Sample Only
1-REP2	Repeat					Repeat Sample Only
2-ROU	Routine					
2-REP1	Repeat					Repeat Sample Only
2-REP2	Repeat					Repeat Sample Only
3-ROU	Routine					
3-REP1	Repeat					Repeat Sample Only
3-REP2	Repeat					Repeat Sample Only
4-ROU	Routine					
4-REP1	Repeat					Repeat Sample Only
4-REP2	Repeat					Repeat Sample Only
5-ROU	Routine					
5-REP1	Repeat					Repeat Sample Only
5-REP2	Repeat					Repeat Sample Only

If the water system has one or more total coliform-positive samples, at least five routine samples will be collected the following month.

### ATTACHMENT E:

Boil Water Order – Tier 1 Public Notification Template

### IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Este informe contiene información muy importante sobre su agua potable.

Tradúzcalo o hable con alguien que lo entienda bien.

### DRINKING WATER WARNING

[System] water is contaminated with [fecal coliform or E. coli]

### **BOIL YOUR WATER BEFORE USING**

[Fecal coliform or *E. coli*] bacteria were found in the water supply on [date]. These bacteria can make you sick, and are a particular concern for people with weakened immune systems.

### What should I do?

- DO NOT DRINK THE WATER WITHOUT BOILING IT FIRST. Bring all water to a boil, let it boil for one minute, and let it cool before using, or use bottled water. Boiled or bottled water should be used for drinking, making ice, brushing teeth, washing dishes, and food preparation until further notice. Boiling kills bacteria and other organisms in the water.
- Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems. The symptoms above are not caused only by organisms in drinking water. If you experience any of these symptoms and they persist, you may want to seek medical advice.
- People with severely compromised immune systems, infants, and some elderly may be at increased risk. These people should seek advice about drinking water from their health care providers. General guidelines on ways to lessen the risk of infection by microbes are available from EPA's Safe Drinking water Hotline at 1(800) 426-4791.

### What happened? What is being done?

Bacterial contamination can occur when increased run-off enters the drinking water source (for example, following heavy rains). It can also happen due to a break in the distribution system (pipes) or a failure in the water treatment process.

[Describe corrective action]. We will inform you when tests show no bacteria and you no longer need to boil your water. We anticipate resolving the problem within [estimated time frame].

For more information, please contact [name of contact] at [phone number] or [mailing address].

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this public notice in a public place or distributing copies by hand or mail.

### **Secondary Notification Requirements**

Upon receipt of notification from a person operating a public water system, the following notification must be given within 10 days [Health and Safety Code Section 116450(g)]:

• SCHOOLS: Must notify school employees, students, and parents (if the students are minors).

### ATTACHMENT F:

Water Quality Monitoring Schedule

### WATER QUALITY MONITORING SCHEDULE

## Transient Noncommunity System (TNC1) UPDATED - September 2015

Chemical - Title 22	MCL (mg/L)	Frequency
Primary Inorganics - Section 64432		
Aluminum	1	Not Required
Antimony	0.006	Not Required
Arsenic	0.010	Not Required
Barium	1	Not Required
Beryllium	0.004	Not Required
Cadmium	0.005	Not Required
Chromium (Total Chromium)	0.05	Not Required
Hexavalent Chromium (Chrome 6)	0.010	Not Required
Cyanide	0.15	Not Required
Fluoride	2.0	Once only
Mercury	0.002	Not Required
Nickel	0.1	Not Required
Perchlorate	0.006	Not Required
Selenium	0.05	Not Required
Thallium	0.002	Not Required
Asbestos - Section 64432.2		
Asbestos - Source Water	7 MFL	Not Required
Nitrate/Nitrite - Section 64432.1		
Nitrate (as N)	10	Annually if ≤ 5 mg/L (1)
Nitrite (as nitrogen)	1	Every 3 years if < 0.5 mg/L (2)
Nitrate + Nitrite (sum as nitrogen)	10	N/A
Secondary Standards - Table 64449-A	CALL SEE SHIP SEE SAN AS A SEE	TO STATE OF THE SAME AND ALL OF THE
Aluminum	0.2	Not Required
Color	15	Not Required
Copper	1.0	Not Required
Foaming Agents	0.5	Not Required
Iron	0.3	Once only
Manganese	0.05	Once only
Methyl-tert-butyl ether (MTBE)	0.005	Not Required
Odor	3	Not Required
Silver	0.1	Not Required
Thiobencarb	0.001	Not Required
Turbidity	5	Not Required
Zinc	5	Not Required
General Minerals - Section 64449		
Bicarbonate	N/A	Once only
Carbonate	N/A	Once only
Hydroxide Alkalinity	N/A	Once only
Calcium	N/A	Once only
Magnesium	N/A	Once only
Sodium	N/A	Once only
Hardness	N/A	Once only
Н	N/A	Once only
Secondary Standards - Table 64449-B		
TDS	500-1000;1500	Not Required
Specific Conductance	900-1600; 2200	Once only
Chloride	250-500;600	Not Required
Sulfate	250-500;600	Not Required

MCL = Maximum Contaminant Level

Contact your district office with any questions.

- (1) Nitrate (as N) replaces Nitrate (as NO3). Nitrate (as N) sampling shall increase to quarterly following any result ≥ 5 mg/L. Upon request, this may be reduced to an annual frequency after 4 quarters of monitoring. Beginning with Jan. 1, 2016, water systems shall comply with the Nitrate (as N) requirement.
- (2) Nitrite sampling shall be increased to quarterly following any result ≥ 0.5 mg/L. Upon request, this may be reduced to an annual frequency after 4 quarters of monitoring.

### DRINKING WATER FIELD OPERATIONS BRANCH

### NOTICE OF CITATION ISSUANCE PENALTY

### **BACKGROUND STATEMENT**

The State Water Resources Control Board, Division of Drinking Water, issued Citation No. 03-11-17C-012 for the Pelligrini Properties/El Campo Market (Public Water System No. 2400340).

This Citation carries a penalty of \$1,500.00 (one thousand and five hundred dollars).

### METHOD OF PAYMENT

Within 90 days of receipt of this Citation, submit a check in the amount of \$1,500.00 made payable to:

**SWRCB** – Division of Drinking Water

and mail to:

SWRCB Accounting Office ATTN: Drinking Water Program Fees P.O. Box 1888 Sacramento, CA 95812-1888

(Please indicate the Citation Number on the Check)

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